

REMARKS

Appreciation is expressed for the telephonic interview accorded applicant's attorney, Mr. Lee, the inventor, Mr. Margolus, and an employee of the assignee, Permabit. At the interview, the anticipation rejection of claim 1 over Farber was discussed, and the examiner agreed that an amendment agreed to at the interview would overcome the rejection. The Section 112, written description rejections of claims 1, 187, and 188 were also discussed, and it was agreed that applicant would present, again, the supporting disclosure in the specification for the language in question.

An amendment has been made to claim 178 to overcome the examiner's objection (page 2).

Amendments have been made to claims 33, 47, 49, and 63 to address the examiner's formal objections to the language of the claims. These amendments are not required for patentability. The examiner has also made objections to claims 36 and 41, but nothing can be found in those claims that could explain the examiner's objections.

Claims 98-153, which were earlier withdrawn, have been cancelled, as requested by the examiner.

The examiner has rejected claim 1 under 35 USC 112, first paragraph, as failing to comply with the written description requirement. The step asserted to not be described in the specification is:

storing the second data item in the data repository if comparing establishes that a data item identical to the second data item is not already stored in the data repository, and not storing the second data item in the data repository if comparing establishes that a data item identical to the second data item is already stored in the data repository.

As explained at the interview, this step is clearly disclosed in the specification (e.g., paragraph 60 of the published application, US 2002-0038296 A1):

[0060] To deposit a data-item 3 into the repository, the dataname 3a is first used to check whether or not the repository already contains a copy of the data-item. The data-client 1 communicates with the repository data-server 2, asking whether a given dataname 3a corresponds to an existing repository data-item. If not, the data-client sends the data 3. The repository data-server 2 independently recomputes the dataname 3a by hashing the data-item received, in order to verify correct transmission, and to avoid any danger of associating the wrong dataname with a given repository data-item. Once a data-item is in the repository, it never needs to be sent again by anyone (unless it has been removed).

The examiner has rejected claim 187 under 35 USC 112, first paragraph, as failing to comply with the written description requirement. The step asserted to not be described in the specification is:

a plurality of clients each of which has initiate a process to deposit an identical data item all share read access to a single repository data item.

As explained at the interview, this step is clearly disclosed in the specification (e.g., paragraphs 62 and 63 of the published application, US 2002-0038296 A1):

[0062] Although repository data-items are written directly, in the primary embodiment of this invention they can only be read indirectly, by referring to "named-objects" such as 10 and 12 in FIG. 2. This property is not shared by the scheme of Farber and Lachman mentioned in the background section. This restriction is imposed for several reasons. First of all, this provides a mechanism for associating a fixed name with changing data: reading the same named-object, different data-items are retrieved at different times. Secondly, this level of indirection is used to implement an access control mechanism for shared data: it is useful to control access to a named-object (e.g., file), rather than to a particular string of bits (i.e., data-item). By associating access-control information with named-objects, restrictions can be placed on which users are allowed to read particular named-objects in the repository. Finally, if the repository handles the creation and modification of the named-objects, then it can tell if a particular data-item is currently associated with any named-object: this makes it possible to identify unreferenced data-items and reuse their storage space.

[0063] For these reasons, the repository maintains a named-object database. After ensuring that a data-item 3 being transmitted resides in the repository, the client 1 communicates with the data-server 2 in order to associate the data-item 3 with a named-object 3d (FIG. 2). It is possible for the data-server 2 to require that the

claim submit a "dataproof", i.e., verify that the client actually has a copy of the data-item 3 being transmitted (and not just a dataname provided by some outside agency) before granting repository read access by associating the data-item 3 with the named-object 3d. A read client 5 (FIG. 3) associated with client 1 can use the access-authorization credential 3b that was generated in the deposit transaction to subsequently read data-item 3 indirectly by reference to named-object 3d, but no client can directly read data-item 3. All clients which read using named objects (such as 3d and 10) that are associated with the same dataname 3a actually share access to a single repository data-item 3.

The examiner's attention is directed in particular to the first sentence of paragraph 62, the second sentence of paragraph 63 and the last sentence of paragraph 63.

The examiner has rejected claim 188 under 35 USC 112, first paragraph, as failing to comply with the written description requirement. The step asserted to not be described in the specification is:

clients which have not initiated a process for depositing the identical data item do not possess a credential that authorizes them to read the identical data item.

As explained at the interview, this step is clearly disclosed in the specification (e.g., again see paragraphs 62 and 63 of the published application, US 2002-0038296 A1). In this case, the examiner's attention is directed in particular to the penultimate sentence of paragraph 63.

The examiner has rejected claim 1 as anticipated by Farber. As explained at the interview, Farber fails to teach the invention of claim 1 in at least one very important respect. The invention calls for the physical location at which a data item is stored to be determined at least in part by the digital fingerprint of the data item, with the result that the pseudorandomness of the digital fingerprints introduces pseudorandomness into the physical locations at which data items are stored.

Farber, by contrast, teaches the same storage approach taught in Shnelvar, the examiner's prior reference. A table is maintained that relates digital fingerprints to pointers that specify the physical locations at which data items are stored. Thus, the physical locations are determined not by the digital fingerprints but by the pointers, and thus no pseudorandomness is introduced into the physical locations.

The examiner agreed with applicant's position on Farber, and indicated that if claim 1 was amended in the manner amended herein that the claim would be patentable over Farber.

The remaining claims are all properly dependent on claim 1, and thus allowable therewith. Each of the dependent claims adds one or more further limitations that enhance patentability, but those limitations are not presently relied upon. For that reason, and not because applicants agree with the examiner, no rebuttal is offered to the examiner's reasons for rejecting the dependent claims.

Allowance of the application is requested.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: May 9, 2006

/grogerlee/
G. Roger Lee
Reg. No. 28,963

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906